

Operation Swayne's Hartebeest

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The largest concentration of Swayne's hartebeest, a race found only in Ethiopia, of which not more than 1000 animals are believed to survive, is threatened by spreading cultivation and the introduction of mechanised farming. The Wildlife Conservation Organisation of Ethiopia decided to translocate as many as possible to safer areas, and this year succeeded in taking 203 to the Awash National Park and to Nachisar where a park is projected. In this article the Deputy Chief Game Warden describes the operation.

Swayne's hartebeest *Alcelaphus buselaphus swaynei* is an endemic subspecies in Ethiopia, one of the three distinct races or subspecies that extend across the Ethiopian plains: Swayne's in the central and south-west plains, *A. b. lelwel* in the south-east, and tora *A. b. tora* in the west and north-west. The total number of Swayne's is about 1000, with a concentration of about 400 at Sankalle, in the central plains.

The whole Sankalle region is heavily settled by pastoralists, and recently a great deal of mechanised farming of cash crops has developed. Both factors have seriously threatened the existence of Swayne's hartebeest. To save them the Wildlife Conservation Organisation of Ethiopia decided to translocate them to safer areas, where they would have maximum protection. In May 1974 about 90 were taken to the Awash National Park, and another 120 were released in Nachisar, where a national park is projected and there are already a good number of Swayne's hartebeests—see Melvin Bolton's article in *Oryx*, May 1973. The climate and vegetation of both the Awash and Nachisar are comparable to Sankalle, and plenty of water is available.

IN THE CORRAL and . . .

INTO THE TRUCK



The budget allowed was only E\$20,000 (approximately £3500), and careful plans were drawn up well ahead to keep the operation within the allocated funds. The capturing site and location of the trap enclosure were carefully chosen, the latter in a natural depression undisturbed by cattle. Cattle were removed from the area and salt put down to attract the hartebeest. Then a funnel was erected with one wing over 2 kms long and the other 1 km long, leading to a circular enclosure, from the back of which an angled funnel-like chute led up to a ramp from which animals could be loaded into trucks.

Two barriers were put up across the funnel, one of cloth in a shallow trench across the wide mouth of the funnel's long wing, and the other 50 metres wide across the mouth of the circular trap-enclosure itself. The former consisted of a cloth screen laid in a shallow trench. Once the animals had crossed the first barrier line, this screen was lifted and hooked on to nails in the poles supporting the funnels and enclosure. The second barrier worked on the principle of drawing curtains, and had to be rapidly reinforced with a wire mesh screen once the animals were in the trap. The funnel and the enclosure were made of hessian supported where necessary by wire mesh.

The drive was conducted in Land Rovers spaced at 100-metre intervals with men walking between them. The animals were driven slowly, without any disturbing noise, towards the circular enclosure. The operation began on May 30th and continued till the middle of June; 210 Swayne's hartebeests were translocated, with only seven casualties, some due to exhaustion, others to being horned by bigger animals during the drive.

Lack of funds stopped the operation, but in the near future we hope to resume and translocate the remaining animals and thus save them from extermination.

Swayne's hartebeests are mostly grazers and browse only the occasional choice forb or herb. They will travel long distances if

ON THE NACHISAR FERRY and . . .

FREEDOM



necessary in search of water, and will even travel at night if they are disturbed in the day.

Herd, mostly females, young and yearlings, led by one bull, may comprise 100 to 150 animals, but more commonly number 20–50. Bachelor males usually stay in groups of four or six, and not in big groups. In the mating season those that stay single defend their territories, and mark them with their sub-glandular secretion, a black tar-like musk. Though odourless to human beings, other hartebeest can detect the scent from a distance. Old bulls, displaced from leadership by younger bulls, stay solitary, roaming at a distance from the herd, and not marking their territories. Usually male yearlings also, when they reach maturity, are thrown out of the herd by the bull leader.

Both males and females carry horns, making it difficult to distinguish between them from a distance, but the male's are usually thicker. Swayne's hartebeest is a heavy animal, weighing about 450 lb at maturity. In areas where other species occur they will inter-mingle and make a big social herd.

In the mating season, the males break out of the herd and each marks a territory that can accommodate and feed a herd, and defends it against all other males, even to the point of fighting. This is the only time that herds are led by old females, until each joins a territorial male. As soon as calving takes place the males takes over the lead.

Endangered in Italy

The Italian WWF has issued a list of mammals and birds believed to be in danger of extinction in Italy. The mammals are brown bear *Ursus a. arctos*, Abruzzo brown bear *U. a. marsicanus*, chamois *Rupicapra rupicapra ornata*, Corsican red deer *Cervus elaphus corsicanus*, Appennine wolf *Canis lupus italicus*, Mediterranean monk seal *Monachus monachus*, European otter *Lutra lutra*, wild cat *Felis silvestris*, Alpine ibex *Capra ibex*, *Capra aegagrus*, the wild goat of Montecristo island, mouflon *Ovis musimon*, stoat *Mustela erminea*, crested porcupine *Hystrix cristata*.

The 32 birds include 13 birds of prey and 16 water birds, among them flamingo, two woodpeckers and little bustard.

Ethiopia's Choice

Conservation for Survival (Haile Selassie I University, £1.20) consists of ten short lectures Leslie Brown delivered at the University in 1971. Their message is just as important and relevant today, and fortunately there are also now signs that it is being heeded in Addis Ababa. Everything, says the author, comes back (as in most other countries) to unwise use of land by man. He suggests a programme 'to halt present trends and achieve a better life for all rural people'; he shows how wildlife conservation can be fitted into and contribute to such a programme.

Resources in Malaysia

The *Proceedings* of the 1972 Symposium on Biological Resources and National Development are obtainable from the Malayan Nature Society, PO Box 750, Kuala Lumpur. (See Reef Destruction, page 522.)

SSC 1963–1974

Richard Fitter

The Survival Service Commission of IUCN acquired a new look in 1963. What has it achieved in those 12 years? The FPS Hon. General Secretary, who has been a member of the SSC throughout the period and also of the Commission's small Alert Group since it was formed in 1972, looks at the evidence and tries to draw up a balance sheet.

After the Nairobi General Assembly of IUCN in September 1963, the Survival Service Commission, the arm of the Union charged with the task of securing the survival of species, changed gear. Under a new chairman, Peter Scott, it began to meet three or four times a year, instead of only once or twice in a triennium, and it acquired a full-time secretary. Ten years having elapsed since these changes lifted the SSC's activities on to a different plane, it seems reasonable to examine its effectiveness as an instrument for achieving its primary aim: to prevent the extinction of species. In making this assessment I have been greatly assisted by a detailed analysis of the Minutes of SSC meetings, kindly prepared by Anthony Chapman.

Far and away the SSC's greatest contribution has been the Red Data Books, the brainchild of its new chairman. This brilliant conception focussed attention on fact-gathering, without which it was impossible to grapple with the practicalities of saving species. At the time of writing, five volumes, in greater and less stages of comprehensiveness, have been published: mammals, birds, reptiles and amphibians, freshwater fish, and flowering plants. A number of others have been mooted, but none at present are actually being compiled, there is in fact no immediate prospect of books for endangered insects, crustaceans, molluscs, or other invertebrates, ferns, mosses, lichens or fungi. The five existing volumes are in a continuous state of revision, as was envisaged from the beginning—which is why they are in loose-leaf format, and they are established as the authoritative international reference source on endangered species. Their influence has been widespread. As early as 1968 the mammals volume was the reference source for the US Endangered Species Act, and they are now used universally for this purpose, notably in the preparation of the appendices of the 1973 Washington Convention on Trade in Endangered Species. They are also being increasingly copied by individual countries. The United States was first in the field with a Red Book of its own, prepared by the Bureau of Sport Fisheries and Wildlife, *Rare and Endangered Fish and Wildlife of the United States*. A similar volume for the United Kingdom is being prepared by the voluntary movement, working through the Conservation Liaison Committee of the Society for the Promotion of Nature Reserves. The USSR has already prepared a mammal volume and is working on others.

The Endangered Species Convention itself, though a product of the Union as a whole, with the Legislation Commission also playing a vital part, is a matter to which the SSC has paid constant attention. When it finally comes into force—and at the time of writing only two countries, the USA and Switzerland, of the necessary ten have ratified it—the SSC can certainly claim a substantial part of the credit due to IUCN for promoting it and carrying it through to fruition with the aid of the United States and other governments.

While the Red Data Book has been one of IUCN's most successful enterprises since its inception, the follow-up by the SSC itself has left much to be desired. At first efforts were made at each meeting to review the plight of a selection of mammal species from the RDB, using the 'Action Treatment', a systematic list of available methods and techniques devised by the Chairman. However, the pressure of urgent 'fire-brigade' issues soon crowded this out. In effect the SSC has treated the RDB as an information source rather than as a list of urgent projects.

One of the more imaginative techniques invented by the SSC—I think the first proposal came from Noel Simon—was the Ultimate Responsibility Scheme. Under this governments whose territories contained all or an important part of the stock of an endangered species were invited to accept special responsibility for its survival. Those who accepted received a scroll recording the fact, signed by the Chairman of the SSC. After five governments had accepted special responsibility for seven species—Cyprus with its mouflon was the first—the scheme fell into desuetude, and has only recently been revived.

Turning now to the way in which the SSC has actually tackled its task, the number of species which it can actually be said to have saved from extinction in this period is very small: polar bear, vicuña, Javan rhinoceros, tamaraw and monkey-eating eagle. The number whose slide in the direction of extinction it has checked or helped to check is much larger: it includes orang utan, aye-aye, golden lion marmoset, kouprey, Arabian oryx, the great whales, Asiatic lion, Iriomote cat, tiger and Atlantic ridley turtle. No species appears to have become extinct, or to have moved appreciably nearer extinction, since 1963 as a result of wrong action or failure to act by the SSC after its plight had been reported to the SSC, except insofar as the continued decline of the fin whale is due to IUCN's failure to exert sufficient pressure on the International Whaling Commission. On the other hand a great many species are in just as great danger of extinction in 1974 as ten years ago, partly because the SSC has not had the resources or the time to deal with them. It is, of course, impossible to calculate how great the SSC's influence has been, in general terms, on governments, organisations or individuals. But the SSC's very existence, the pressure it has generated, and the publicity it has promoted, must often have been responsible for guiding decisions that have helped to save some endangered species or avert threats to others. The disastrous decisions that are never made get no publicity, but are all-important.

The SSC operates on two levels, directly by itself, and latterly

also by its Alert Group, and, increasingly, through specialist groups. The action that can be achieved through a specialist group that meets from time to time is usually much more decisive, comprehensive and effective than what the Commission itself can do for one item in the midst of a heavy agenda. In what follows, therefore, the direct achievements of the SSC will be considered first, followed by an assessment of the work of the specialist groups.

First the Commission's own undoubted successes:

Javan Rhinoceros *Rhinoceros sondaicus*. In 1963 this appeared to be the mammal in the greatest danger, with perhaps no more than 24 individuals surviving precariously in its sole known remaining locality, the Ujung Kulon Reserve in western Java. Vigorous action by the SSC, aided by WWF and the Geigy Foundation, resulted in the setting up of a research centre, manned by a succession of mainly Swiss scientists, and the provision of a 'continuing scientific presence'—it was in this connection that the phrase was first coined—and the supply of necessary equipment—a boat, buildings, uniforms for the guards, and money to pay their wages. As a result, we not only know a great deal more about the ecology of the Javan rhino, but the sanctuary has been efficiently guarded and the number of rhinos has nearly doubled, to between 38 and 46.

Tamaraw *Bubalus mindorensis*. The SSC's first efforts to save the tamaraw, reported as continuing seriously to decline in the Philippines, involved attempts to set up captive breeding stocks, and came to nought. The Commission then devised a method that resulted in its second most striking and lasting achievement in the period. It despatched a two-man mission, consisting of the late General Lindbergh and Professor Tom Harrisson, who, operating at different levels, brought together the various parts of the jigsaw needed to stimulate the Filipinos themselves to save not only the tamaraw but also the monkey-eating eagle. The landowners concerned were persuaded to set aside adequate sanctuaries, to restrain hunting and poaching, and to secure a continuing scientific presence of local scientists. All this was quickly achieved, with great economy of effort, and the latest information is that the structure they erected on behalf of the SSC still stands, amid the wreckage of the rest of the Filipino conservation effort, and the tamaraw is not only saved but perhaps slowly increasing again. The eagle is less fortunate in that its habitat is still being destroyed. The Lindbergh/Harrisson mission is a textbook example of this method of saving a rare animal, but it could be said that it requires men of their standing to achieve it.

It is, regrettably, impossible to claim any further genuine successes of the order achieved with the Javan rhino and the tamaraw. Perhaps the time scale is too short to have permitted more. The following represent, however, some solid achievements of a lesser order:

Orang-utan *Pongo pygmaeus*. Thanks to the initiative of Tom and Barbara Harrisson, the SSC set up the Orang-utan Recovery Service (OURS). This attempted to deal with the problem of smuggled

orang-utans by providing an outlet for confiscated animals that did not involve passing them back into trade channels. A number of confiscated orang-utans were rehabilitated—usually they had suffered considerable hardships in captivity—and passed on to reputable zoos which had contributed towards the cost of the scheme, though without any guarantee that they would actually receive an orang-utan. This played its part in checking the market for smuggled orang-utans, but of course could not help at all to meet the major threat to the orang-utan constituted by the rape of the rain forests throughout its range.

Aye-aye *Daubentonia madagascariensis*. The SSC has strongly supported the campaign, headed by J. J. Petter, to save this and other lemurians, and played its part by helping to secure financial aid from WWF. The main credit here undoubtedly belongs to Petter and his institution in France. It is sad to note the recent deterioration in the Malagasy political situation, which threatens this whole effort.

Golden Lion Marmoset *Leontopithecus rosalia*. Much the same applies here; the main credit goes to the Brazilian scientists concerned, with strong support from SSC member John Perry. At the time of writing lack of finance still holds up the plan to establish captive breeding stocks on site in Brazil. This is only one instance of many where the SSC knows exactly what needs to be done, but has so far failed to secure the necessary money.

Kouprey *Bos sauveli*. The SSC addressed itself vigorously to the problem of saving the kouprey, but the fighting in Cambodia has so far thwarted all action even though the funds for a preliminary survey had been collected by both IUCN and FPS.

Arabian Oryx *Oryx leucoryx*. Much time has been devoted to the World Herd and ancillary problems, but it cannot be said that the SSC as such contributed greatly to the success of this project. Credit here belongs to the Trustees of the World Herd, of whom, by a historical accident, the SSC was not one. Here again the local situation has deteriorated and the animal may even be extinct in the wild, so that the captive herds are all-important.

Whales *Cetacea*. Much time has been devoted to discussing the fate of the great whales, especially in supporting IUCN's position as an observer at meetings of the International Whaling Commission, for instance by helping to persuade the IWC to abolish the blue whale unit and fix quotas by species. The SSC on several occasions considered the Gulland Plan for transferring ownership of the great whales to the United Nations, but nothing has come of this so far. The success in persuading the Peruvian whaling companies to stop taking the blue whale was largely a personal initiative by General Lindbergh.

The Specialist Groups

Perhaps the SSC's second most valuable contribution to IUCN has been its creation of a network of specialist groups, either for single species (Polar Bear, Wild Horse, Vicuña) or for genera (Wolf), families (Cats, Seals, Rhinoceros, Deer, Orchids), groups of families (Marine Turtles), orders (Bats, Primates, Whales, Crocodiles), or even groups of orders or classes (Freshwater Fish, Reptiles and Amphibians). In conjunction with ICBP similar specialist groups have been set up for birds—to date for cranes, flamingoes, bustards, pheasants, birds of paradise and birds of prey. A wildfowl group is in process of formation. These groups operate with varying success, but have always been invaluable as sources of information. The most successful groups tend to be those with small constituencies, single species or genera, and those which manage to meet reasonably frequently. In two cases (Bats, Wild Horse) an existing group has accepted the status of an IUCN group.

The two groups which can claim to have done most to save a species are the Polar Bear Group (which is exceptional in having members with governmental status and funds to attend regular meetings) and the Vicuña Group. The Polar Bear Group has achieved an intergovernmental agreement which ensures the safety of the polar bear provided it is adequately enforced by the five governments concerned (Canada, Denmark, Norway, USA, USSR). The Vicuña Group has focussed attention on an animal whose plight was grave everywhere when it began work in 1970, and has stabilised the situation in Peru and improved it in Argentina, Bolivia and Chile.

The Cat Group has helped towards the saving of the Asiatic lion and the Iriomote cat, but it is too soon to say that it has saved them. Operation Tiger was originated by WWF, outside the SSC framework, but the SSC (at New Delhi in 1969) played an important part by focussing attention on the steep decline in tiger numbers. The Bat, Primate, Wolf, Seal, Whale and Deer Groups started serious work too recently to have had a chance to affect individual species. So have the various bird groups. The Marine Turtle and Crocodile Groups have both met at least twice and drawn up important research programmes, but neither can yet be said to have had a real impact on grappling with the problems of saving their various species from extinction. It was the Commission itself, before the Marine Turtle Group was fully launched, that concerned itself with the plight of the Atlantic ridley turtle, and may have helped to secure it the protection needed for its *arribadas* on the Gulf coast of Mexico.

It would be invidious to analyse the causes of failure of the handful of groups that never really got off the ground, some of which are at present in process of being reorganised. But generally speaking a group is successful in proportion to the time its Chairman or some other energiser can give to it. Several attempts have been made to set up a Zoo Group or Zoo Liaison Group, to keep the SSC in touch with the zoo world, but so far this has never worked. The latest initiative by an independent Zoo Group may prove more successful.

It is a legitimate criticism of the SSC that it has never really

addressed itself to the problems of endangered invertebrates and plants. Attempts are still being made to start specialist groups for some invertebrate groups, such as Lepidoptera and molluscs, but invertebrate specialists seem still largely unaware of the existence of endangered species or the need to do anything about them. The plant scene looks much healthier now that Professor Heslop-Harrison's Committee is getting under way, after prolonged and urgent discussions inside and outside the SSC. The sole existing SSC group for plants, the Orchid Group, will be incorporated in the new plant set-up, and other groups, e.g. for palms and conifers, probably established.

To summarise the situation now: the major success of the SSC is undoubtedly the launching of the Red Data Books, followed by the creation of the specialist groups network. Five species may legitimately be regarded as having been saved from extinction or a strong trend towards extinction: polar bear, Javan rhino, vicuña, tamaraw and monkey-eating eagle. Should the SSC be judged a relative failure because of this small number of species actually saved over a period of ten years? The effort to save a species is an ongoing process, and it is not easy to say at what point it has actually succeeded. In the famous case of the heath hen at Martha's Vineyard, the bird made a spectacular recovery, and was widely believed to be safe, when it suddenly took an equally steep plunge downwards and actually became extinct. The SSC should therefore be judged as much by its general and continuing effort and by the widespread influence it and its members exercise world-wide on the climate of opinion. It is in no small degree due to the SSC, coupled with WWF, that there is now a far greater degree of awareness of the problem of endangered species, and a far greater desire to save endangered species, than there was when the present phase of SSC's work began in 1963. In that sense rather than in numbers of species so far actually saved, it is fair to adjudge the SSC a success and its effort as having been exceedingly worth while.

Seventy Years of Birdwatching, by H. G. Alexander. Poyser, Berkhamsted, Herts, £3.80.

In his autobiography Horace Alexander reveals himself to be very much a founder of modern bird-watching and field research in ornithology. Once again one realises how much of the modern world was being born in the decade before the First World War, only to be suppressed for a generation. The modern attitude to bird watching reasserted itself sooner than some other aspects of our national life, with the foundation of the British Trust for Ornithology in the early 30s. Yet the roots of it are all here with the Alexander brothers cycling across the Kentish Weald to Dungeness, censusing singing males as they went, and struggling to identify such then great rarities as firecrests with the inadequate books available. We get too an inkling of the revolution in attitude involved in Harry Witherby's launching of the journal *British Birds*, a manifesto of the field men against the museum mentality. This is an important book for the sociology of bird-watching, as well as a fascinating one for those who just like to watch birds.

R. F.